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SLIDING PANEL PHOTOGRAPHIC CARD

CROSS-REFERENCE TO RELATED APPLICATION

Not Applicable

FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not Applicable

BACKGROUND OF THE INVENTION

Cross-reference to related application:

The present non-provisional application claims the priority of provisional application serial number 60/263,466, filed on January 23, 2001.

Field of the Invention

This invention relates to the field of devices for the display of graphic images, and particularly photographs. More specifically, it relates to a device in which two images or photographs are simultaneously held in a single holder in overlapping relationship and can be selectively displayed within a frame formed by the holder. The invention also relates to a die-perforated carrier from which the device is formed.

Brief Description of Prior Art

Display devices in the form of frames, some of which are normally hung on walls or like vertical surfaces, and others which are normally placed on horizontal surfaces to display images, such as pictures or photographs, are well known in the art. However, as far as the present inventor is aware, there is no display device in the prior art which can hold two different images in overlapping relationship with one image covering the other, and allow the

1 display of one of the two images at the option of a user by simple pulling of a
2 tab or the like. Moreover, as far as the present inventor is aware there is no
3 method known in the prior art, which allows the computer controlled printing
4 of the images on pre-die-cut sheets of paper and assembly of the printed
5 sheets into the display device. The present invention provides this type of
6 display device and a method of preparing of the same, which have hitherto
7 been missing from the prior art.

8 SUMMARY OF THE INVENTION

9 Broadly, the present invention is a sliding panel photographic card
10 comprising front and rear panels, each bearing a different image or
11 photograph, and each divided into a plurality of parallel strips. The strips of
12 the front panel are arranged as slidable interleaves between the strips of the
13 rear panel, whereby the strips of the front panel are movable between a first
14 position, in which the strips of the rear panel are completely covered by the
15 strips of the front panel, and a second position, in which the strips of the front
16 panel are completely hidden behind the strips of the rear panel. Thus, in the
17 first position, only the image on the front panel is visible, while in the second
18 position, only the image on the rear panel is visible.

19 The front and rear panels are held together in the interleaved
20 relationship in a holder that forms a frame. The rear panel is fixed in the

1 holder, while the front panel is held in the holder so as to be slidable between
2 the first and second positions. The front panel includes a pull tab extending
3 from its bottom edge, which may be grasped to move the front panel between
4 the first and second positions.

5 The invention also resides in the method of making the above-
6 described sliding panel photographic card. The method comprises the steps of
7 (a) providing a first sheet of photographic quality (or like) printer paper die-
8 perforated in first and second patterns corresponding to the front and rear
9 panels, each divided into a plurality of parallel strips respectively; (b)
10 providing a second sheet of paper or carton in a third pattern corresponding to
11 the frame; (c) printing a first image onto the first pattern and a second image
12 onto the second pattern; (d) removing the first and second patterns from the
13 first sheet to form the first and second panels bearing strips forming the first
14 and second images, respectively; (e) assembling the front and rear panels in
15 overlapping relationship with the strips of the front panel interleaved between
16 the strips of the rear panel; (f) removing the third pattern from the second
17 sheet to form an unfolded holder/frame member; and (g) installing the
18 assembled front and rear panels in the holder/frame member so that the rear
19 panel is held in a front-to-back relationship with the front panel, and the front
20 panel is slidable between a first position in which the strips of the rear panel

1 are completely covered by the strips of the front panel thereby showing the
2 first image, and a second position, in which the strips of the front panel are
3 completely hidden behind the strips of the rear panel thereby showing the
4 second image.

5 BRIEF DESCRIPTION OF THE DRAWING FIGURES

6 **Figure 1** is a perspective view of the photographic card of the present
7 invention, the view showing a first panel displaying an image.

8 **Figure 2** is a plan view of the photographic card of the present
9 invention, the view showing a first panel displaying an image.

10 **Figure 3** is a plan view of the photographic card of the present
11 invention, the view showing a second panel displaying a different image.

12 **Figure 4** is a plan view of a die-perforated first sheet before any image
13 is printed thereon.

14 **Figure 5A** is a plan view of a die-perforated second sheet before
15 removal of any excess material.

16 **Figure 5B** is a plan view of the die-perforated second sheet after
17 removal of excess material.

18 **Figure 6** is a plan view of the die-perforated first sheet after first and
19 second images are printed thereon.

20 **Figure 7A** is a plan view of a part of a rear panel after removal from

1 the left side of the front sheet.

2 **Figure 7B** is a plan view of another part of the rear panel after
3 removal from the left side of the front sheet.

4 **Figure 7C** is a part of a front panel after removal from the right side of
5 the front sheet.

6 **Figure 7D** is another part of a front panel after removal from the right
7 side of the front sheet.

8 **Figure 8A** shows the manner of interleaving the two parts of the front
9 panel.

10 **Figure 8B** is a plan view of the front panel interleaved from the two
11 parts.

12 **Figure 8C** is a cross-sectional view taken on lines 8C,8C of Figure 8B.

13 **Figure 9A** is a plan view showing the manner of interleaving the two
14 parts of the rear panel.

15 **Figure 9B** is a plan view of the rear panel interleaved from the two
16 parts.

17 **Figure 9C** is a cross-sectional view taken on lines 9C,9C of Figure 9B.

18 **Figure 10** is a plan view showing the assembly of the front and rear
19 panels.

20 **Figure 11** is a cross-sectional view taken on lines 11,11 of Figure 10.

1 **Figures 12A - 12D** are rear perspective views, respectively showing
2 the steps of assembling the front and rear panels and the second sheet from
3 which excess material has been removed, to form the photographic card of the
4 present invention.

5 **Figure 13** is a cross sectional view taken on lines 13,13 of Figure 2.

6 **Figure 14** is a cross sectional view taken on lines 14,14 of Figure 3.

7 **Figure 15** is a cross sectional view taken on lines 15,15 of Figure 1.

8 **Figure 16** is a plan view of the first sheet of the invention showing the
9 precise areas where images are printed on the first sheet in the preferred
10 embodiment.

11 DESCRIPTION OF THE PREFERRED EMBODIMENT

12 The following specification taken in conjunction with the drawings
13 sets forth the preferred embodiment of the present invention. The
14 embodiment of the invention disclosed herein is the best mode contemplated
15 by the inventor for carrying out his invention in a commercial environment,
16 although it should be understood that various modifications can be
17 accomplished within the parameters of the present invention.

18 Referring now to the drawing figures and particularly to the
19 perspective view of **Figure 1**, photographic card or card assembly **20** of the
20 present invention is disclosed. The photographic card or card assembly **20**

1 comprises a first panel **22** that displays an image, which for the sake of
2 precision in the description is hereinafter termed the first image. **Figure 2** of
3 the appended drawings also shows the photographic card or card assembly **20**,
4 in plan view displaying the first image. The photographic card or card
5 assembly **20** of the present invention also includes a second panel **24** that
6 carries an image, which is hereinafter termed the second image. The views of
7 **Figures 1 and 2** show the card assembly **20** in a position or situation wherein
8 the second panel **24** is disposed behind the first panel **22**, and therefore the
9 second image is hidden from view. **Figure 3** shows the card assembly **20** in a
10 position or situation wherein the first panel **22** is disposed behind the second
11 panel **24**, and therefore the second image is displayed. The herein described
12 preferred embodiment of the card assembly **20** includes an ear or easel flap
13 **26**, which may be folded out from the rear of the card assembly **20**, and which
14 may be used to support the card assembly **20** in an upright standing position
15 on a support surface (not shown), such as a table (not shown). **Figures 1 and**
16 **2** of the drawings disclose a tab **28** which in the preferred embodiment is
17 essentially flush with the lower edge **30** of the card assembly when the first
18 panel **22** displaying the first image is exposed for view. The tab **28** is pulled
19 out, as shown in **Figure 3** when the second panel **24** displaying the second
20 image is exposed for view. The tab **28** can also be folded to occupy a position

1 substantially parallel with a support surface (not shown).

2 The images displayed in the first **22** and second **24** panels may be of
3 varying nature, and are not limited within the scope of the invention. As such,
4 the images may be pictures, photographs, or text, in essence any type of
5 illustration or indicia. Moreover, the images may be placed on the first **22** and
6 second panels **24** in any manner consistent with the ensuing description, for
7 example they could be drawn, painted, silk-screened or deposited by any
8 know technology for placing images on a flat surface. The preferred
9 embodiment of the present invention is nevertheless designed primarily to
10 display photographs or like images, which are likely to be deposited on the
11 first **22** and second **24** panels by a printer (not shown) controlled by a
12 computer (not shown), such as a personal computer (not shown) that utilizes
13 one or more of the well known and commercially available picture and/or
14 photograph printing programs. For the foregoing reasons the present
15 invention is hereinafter described with emphasis on pictures, such as
16 photographs, displayed on the first **22** and second panels **24** and deposited
17 thereon by a printer (not shown) as directed by any of the well known image
18 processing and printing computer programs widely available in the art.

19 It should already be readily apparent from the foregoing description to
20 those skilled in the art that a principal feature of the present invention is that

1 the card assembly **20** holds two pictures or images, and that either one of these
2 can be displayed at the option of a user (not shown) simply by manipulating
3 the tab **28**. The ensuing description discloses the manner of constructing the
4 card assembly **20** that accomplishes this result.

5 A die-perforated (or otherwise pre-cut) first sheet **32** is provided in
6 accordance with the present invention, and is shown in **Figure 4**. Preferably,
7 and in accordance with the first preferred embodiment the first sheet **32**
8 comprises photographic quality paper, more precisely the kind of
9 photographic quality paper on which it is customary to print photographs
10 under the control of a computer (not shown) with the assistance of an image
11 printing program. The first sheet **32** is die-cut in such a manner that a picture
12 or image can be printed onto its right side in 4 strips or sections, and another
13 picture or image can be printed, also in 4 strips or sections on its left side.
14 The picture or image printed on the right side of the sheet **32** corresponds to
15 the first image carried by the first panel **22** in the assembled card **20**, and the
16 picture or image printed on the left side of the sheet corresponds to the second
17 picture or image carried by the second panel **24**. **Figure 4** discloses the first
18 sheet **32** before pictures or images are printed thereon.

19 The printing of the images or photographs on the first sheet is
20 performed by printing each image in 4 parts on the left and right sides of the

1 underlying sheet, respectively, which after separation of the die-cut lines,
2 become strips **36** to be assembled into the respective panels **22** and **24**. Glue
3 carrying areas **38** are provided on the first sheet **32** in the areas shown in
4 **Figures 4 and 6**. Alternatively, the areas **38** may just be marked for external
5 glue (not shown) to be deposited thereon by a user (not shown). The printing
6 of the pictures desired to be displayed in the card assembly **20** of the present
7 invention (the first picture on the right side of the sheet **32**, and the second on
8 the left side) is done by the software-program-controlled printer in accordance
9 with the parameters provided for the first preferred embodiment, wherein the
10 sheet **32** is of the American standard 8.5 by 11 inches in size. These
11 parameters are expressed in inches, as indicated in **Figure 16** and counted, as
12 applicable or indicated from the respective edges **39** of the sheet **32**.

13 It should be understood that printing pictures or other indicia on the
14 first sheet **32** with a printer (not shown) controlled by a personal computer
15 (not shown) having an image processing program, into the spaces defined by
16 the parameters show on **Figure 16** is a task that can be performed by a person
17 skilled in working with state-of-the-art picture processing programs. It should
18 also be understood that different values for these parameters can be designed
19 within the scope of the invention and in light of the present disclosure.

20 **Figure 6** illustrates the first sheet **32** of the invention, after both the

1 first and second images or photographs have been printed thereon, in the
2 above-described manner.

3 A second sheet 40, is provided in accordance with the present
4 invention, and is illustrated in **Figure 5A**. No image is printed or otherwise
5 deposited on the second sheet 40. Rather, the second sheet 40 serves to form
6 a frame and support onto which the image carrying first 22 and second 24
7 panels are assembled. The preferred embodiment of the second sheet 40 is
8 also of the "standard" 8.5 by 11 inches in size, and although it does not
9 receive a printed image it can also be photographic quality paper, or paper or
10 carton of sufficient rigidity that it can serve for receiving the mounted panels
11 22 and 24 and to support them in an up-right position standing on a support
12 surface (not shown). The second sheet 40 also contains perforations or die
13 cutting, to delimit areas or parts which are to be removed and not used for
14 preparing the card assembly 20. **Figure 5B** illustrates the second sheet 40
15 after the unnecessary or excess material has been removed from it.

16 **Figures 7A and 7B** illustrate two parts, that is two pieces 42 and 44,
17 respectively of photographic paper which are obtained from the left side of the
18 first sheet 32, by separating the first sheet 32 into the pieces 42 and 44 along
19 the die-cut or pre-perforated lines. It can be seen that the second image has
20 been printed into the two pieces 42 and 44 in 4 strips 36, and that each piece

1 includes slotted areas or slots 46. Similarly, **Figures 7C and 7D** illustrate two
2 parts, that is two pieces 48 and 50, respectively of photographic paper which
3 are obtained from the right side of the first sheet 32, by separating the first
4 sheet 32 into the pieces 48 and 50 along the die-cut or pre-perforated lines.
5 It can be seen that the first image has been printed into the two pieces 48 and
6 50 in 4 strips 36, and that each piece includes slotted areas or slots 46. The
7 numerals 1, 2, 3, and 4, respectively printed on the edge of the pieces 42, 44,
8 48 and 50, as applicable, refer to the segment or portion of the image which is
9 printed on the respective strip 36, and facilitates the process of printing and
10 assembling.

11 **Figure 8A** shows how the two pieces 48 and 50 are assembled to one
12 another by placing the tab 28 of piece 50 into the slot 46 of the piece 48, and
13 gluing the glued area to the paper above it. **Figure 8B** illustrates the first
14 panel 22 assembled or interleaved from the two pieces 48 and 50. Similarly,
15 **Figure 9A** shows how the two pieces 42 and 44 are assembled to one another
16 by insertion and gluing of the glue carrying areas 38, and **Figure 9B**
17 illustrates the second panel assembled or interleaved from the two pieces 42
18 and 44. **Figures 8C and 9C** show the assembled or interleaved first 22 and
19 second 24 panels in cross-section, respectively.

20 **Figures 10 and 11** illustrate how the first panel 22 bearing the first

1 image is assembled or interleaved to the second panel **24** bearing the second
2 image. This is done so that the panels **24** are disposed in the positions shown
3 in **Figure 11**.

4 Then the two panels **22** and **24** are slid together completely. **Figure 11**
5 illustrates the interleaved first **22** and second **24** panels in cross section, and
6 shows their relationship.

7 **Figure 12A through 12D** illustrate the steps of forming the card
8 assembly **20** from the assembled or interleaved first **22** and second **24** panels,
9 illustrated in **Figures 10 and 11**, and from the second sheet **40**, from which
10 the excess material has been removed, illustrated in **Figure 5B**. Thus,
11 referring now to **Figures 12A through 12D** which illustrate the process from a
12 rear view, the assembled panels **22** and **24** are placed into the open window
13 **51**, with the image bearing side facing forwards, centered and with the top of
14 the assembled panels **22** and **24** flush with the top of the second sheet **40**.
15 This is shown in **Figure 12A**. In subsequent steps flaps **52** of the second
16 sheet are folded up over and on top of the assembled panels **22 and 24**. Some
17 glue (not shown) is applied to the flaps **52** and to the top of the back side of
18 the assembled panels **22** and **24**. Then the large flap or back cover **54** is
19 folded over the flaps **52**. During this operation care must be taken not to
20 remove the assembled panels **22** and **24** from their correct positions. Glue

1 (not shown) is then applied to an elongated gluing area **38** forming a narrow
2 strip **58**, shown in **Figure 12C**, which is thereafter folded back and glued to
3 the back cover **54**. In order to place the card assembly **20** on a support
4 surface(not shown) the easel flap **26** is folded out to support the assembly **20**.

5 As it was noted at the outset, the card assembly **20** of the present
6 invention displays one of the two images or photos at the option of a user (not
7 shown). When the tab **28** is in the in position, as shown in **Figures 1** and **2**,
8 then the first image of the first panel **22** is shown. The image of the second
9 panel **24** is hidden from view because the 4 strips **36** forming the first picture
10 cover the four strips **36** forming the second picture. In order to reverse the
11 situation and display the second image of the second or rear panel **24**, a user
12 (not shown) merely needs to pull on the tab **28** causing the strips **36** of the
13 first panel **20** to slide downward and behind the strips **36** of the second panel
14 **24** thereby revealing the picture of the second panel **24**.